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| FORM PTO/SB/08A/B (10-01) Substitute for PTO-1449A/B INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | Attorney Docket Number | 58270/A400 |
| | Application Number | 10/590,761 |
| | Filing Date | August 24, 2006 |
| | Applicant(s) | Harukazu Kitagawa, et al. |
| | Group Art Unit | 1633 |
| | Examiner Name | Janet L. Epps Ford |

| U.S. PATENT DOCUMENTS | | | | |
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| EXAMINER INITIALS | Cite No. ¹ | DOCUMENT NUMBER Number - Kind Code ² (If Known) | PUBLICATION DATE MM-DD-YYYY | NAME OF PATENTEE |
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| | Include name of the author (in CAPITAL LETTERS), title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. Tokunaga, T. et al., <i>Antitumor Activity of Deoxyribonucleic Acid Fraction From Mycobacterium bovis BCG. I. Isolation, Physicochemical Characterization, and Antitumor Activity</i> , J. Natl. Cancer Inst., Vol. 72, No. 4, April 1984, pp 955-962 Yamamoto, S. et al., <i>Unique Palindromic Sequences in Synthetic Oligonucleotides Are Required to Induce INF and Augment INF-Mediated Natural Killer Activity</i> , The Journal of Immunology, Vol. 148, No. 12, June 15, 1992, pp 4072-4076 Krieg AM. et al., <i>CpG motifs in bacterial DNA trigger direct B-cell activation</i> , Letters To Nature, Vol.374, April 6, 1995, pp 546-549 Verthelyi, D. et al., <i>Differential signaling by CpG DNA in Cs and B cells: not just TLR9</i> , Trends In Immunology, Vol. 24, No. 10, October 2003, pp 519-522 Ballas ZK. et al., <i>Induction of NK Activity in Murine and Human Cells by CpG Motifs in Oligodeoxynucleotides and Bacterial DNA</i> , The Journal of Immunology, Vol. 157, 1996, pp 1840-1845 Boggs RL. et al., <i>Characterization and Modulation of Immune Stimulation by Modified Oligonucleotides</i> , Antisense & Nucleic Acid Drug Development, Vol 7, 1997, pp 461-471 Klinman DM. et al., <i>CpG motifs present in bacterial DNA rapidly induce lymphocytes to secrete interleukin 6, interleukin 12, and interferon gamma</i> , Proc. Natl. Acad. Sci. U.S.A., Vol. 93, April 1996, pp 2879-2883 |

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| | | Halpern, M.D., et al., <i>Bacterial DNA Induces Murine Interferon-γ Production by Stimulation of Interleukin-12 and Tumor Necrosis Factor-α</i> , Cellular Immunology, Vol. 167, Article No. 0009, 1996, pp 72-78 |
| | | Bohle, B. et al., <i>Oligodeoxynucleotides containing CpG motifs induce IL-12, IL-18 and IFN-γ production in cells from allergic individuals and inhibit IgE synthesis in vitro</i> , Eur. J. Immunol., Vol. 29, 1999, pp 2344-2353 |
| | | Iho, S. et al., <i>Oligodeoxynucleotides Containing Palindrome Sequences with Internal 5'-CpG-3' Act Directly on Human NK and Activated T Cells to Induce IFN-γ Production In Vitro</i> , The Journal of Immunology, Vol 163, 1999, pp 3642-3652 |
| | | Hartmann, G. et al., <i>Delineation of a CpG Phosphorothioate Oligodeoxynucleotide for Activating Primate Immune Responses In Vitro and In Vivo</i> , The Journal of Immunology, Vol. 164, 2000, pp 1617-1624 |
| | | Hemmi, H. et al., <i>A Toll-like receptor recognizes bacterial DNA</i> , letters to nature, Vol. 408, December 2000, pp 740-745 |
| | | Hornung, V. et al., <i>Quantitative Expression of Toll-Like Receptor 1-10 mRNA in Cellular Subsets of Human Peripheral Blood Mononuclear Cells and Sensitivity to CpG Oligodeoxynucleotides</i> , The Journal of Immunology, Vol. 168, 2002, pp 4531-4537 |
| | | Hartmann, G. et al., <i>Mechanism and Function of a Newly Identified CpG DNA Motif in Human Primary B Cells</i> , The Journal of Immunology, Vol. 164, 2000, pp 944-952 |
| | | Takauji, R. et al., <i>CpG-DNA-induces IFN-α production involves p38 MAPK-dependent STAT1 phosphorylation in human plasmacytoid dendritic cell precursors</i> , Journal of Leukocyte Biology., Vol. 72, November 2002, pp 1011-1019 |
| | | Halpern, M.D., et al., <i>In vitro inhibition of murine IFNγ production by phosphorothioate deoxyguanosine oligomers</i> , Immunopharmacology, Vol. 29, 1995, pp 47-52 |
| | | Chace, J., et al., <i>Bacterial DNA-Induced NK Cell IFN-γ Production in Dependent on Macrophage Secretion of IL-12</i> , Clinical Immunology and Immunopathology, Vol. 84, No. 2, August 1997, pp 185-193, Article No. II974380 |

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